



THE STATE OF UTAH
OFFICE OF STATE ENGINEER
SALT LAKE CITY

WAYNE D. CRIDDLE
STATE ENGINEER

October 27, 1961

Mr. Lynn M. Thatcher, Chief
Bureau of Sanitation
State Department of Public Health
45 Fort Douglas Blvd.
Salt Lake City 13, Utah

Re: Land Development - Iron County
E.V. W.U.C. Nos. 54, 163, 1334

Dear Mr. Thatcher:

In response to your letter dated October 13, 1961 with regard to Mr. Paul Krump's proposed development in T. 34 S., R. 17 W., Iron County, the following information may be useful to you:

The water rights covered by Escalante Valley Water User's Claims Nos. 163 and 1334 both cover the same well, which is located N. 300 ft. and W. 200 ft. from the NE cor. of Sec. 31, T. 34 S., R. 17 W. A copy of the well driller's report is attached. Correspondence in our files indicates that in 1951 the yield of the well did not exceed 5 gallons per minute. Claim No. 163 is for 0.2 g.p.m. for year-round use for 60 head of cattle. Claim No. 1334 is for not to exceed 6.73 g.p.m. for year-round use for 100 head of cattle.

Claim No. 54 is for 2.228 c.f.s. from a well located S. 2520 ft. and W. 2610 ft. from the NE cor. of Sec. 24, T. 34 S., R. 17 W., to be used to irrigate 33.4 acres of land and for the year-round domestic use of one family. At the present limitation of 4.0 acre-feet per acre, the irrigation use is limited to a total withdrawal of 133.6 acre-feet in any one year. A copy of the original underground water claim is attached and contains data relative to the construction of the well.

The total annual water use under the three rights will be limited to about 135 acre-feet. Our records show a Mr. H. Lane Austin as the owner of the water rights.

The static water level of wells in this area is generally less than 20 feet below land surface. It is not unusual to be able to obtain well yields sufficient for irrigation purposes (in excess of 300-400 g.p.m.) at depths of less than 150 feet.

In general, the water at depths of less than 100 feet is of questionable chemical quality for culinary purposes. However, it should be possible to obtain an acceptable water at depths in excess of 150 feet. We have no record of chemical analyses of well waters in T. 34 S., R. 17 W.; however, our Technical Publication No. 19 contains a useful amount of data on ground water quality in T. 34 S., R. 16 W., and T. 35 S., R. 17 W. These data should be applicable to adjacent areas in T. 34 S., R. 17 W.

Mr. Lynn M. Thatcher

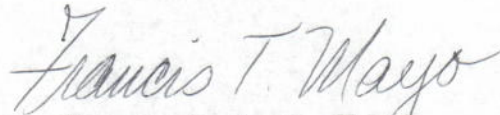
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Do you know whether or not Mr. Krampe plans to install a utility-type water distribution system based on the above water rights or if it is intended to segregate the rights into a sufficient number of parts to provide a separate well water supply for each 2-1/2-acre parcel? If individual cypress tanks are used, the drilling of many small-diameter domestic wells will present a potentially serious public health problem and will likely require a strict control of drilling activities.

The parcels of land mentioned in Mr. Krampe's letter of September 12 are quite widely separated and make it impossible to provide you with specific suggestions as to the identification of aquifers and water quality for such a large area.

Sincerely yours,



Francis T. Mayo, Chief
Water Resources Branch

FTM:ej

Enclosures

cc: R. Keith Higginson
Donald Norseth ✓
Dee Hansen
Harold Donaldson
Hubert Lambert
Paul Krampe